

Subspeciation in the Sociable Weaver *Philetairus socius* of the South West Arid Zone of Africa

by P. A. Clancey

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The Sociable Weaver *Philetairus socius* (Latham), 1790: Warmbad, southern Great Namaqualand, Namibia, is the sole member of a genus of sparrowlike birds peculiar to the dry acacia country and sub-desert of the South West Arid Zone of the Afrotropics, and is renowned for the frequently bulky communal breeding structures it builds in *Acacia* and other trees and in the rigging of telephone poles. It extends from the northwestern Cape Province, north through Namibia to the Etosha Pan National Park, and east to southwestern Botswana, the northern Cape and, marginally, to the southwestern Transvaal and western Orange Free State. Its closest allies are species of *Pseudonigrita*: *P. arnaudi* (Bonaparte) and *P. cabanisi* (Fischer & Reichenow), and, more remotely, the larger *Histurgops ruficauda* Reichenow, all of which are eastern African. Moreau (1962), following Clancey (1957), and later White (1967), admitted 4 subspecies of *P. socius*, these being the nominate race, *P. s. geminus* Grote, 1922, *P. s. eremnus* Clancey, 1957, and *P. s. lepidus* Smith, 1837. However, in the *S.A.O.S. Checklist* (Clancey 1980) only 3 were recognised, *lepidus* being treated as part of nominate *socius*.

Variation in the present species is complex with the 2 basic population groups clearly associated with the general colour of the substrate. The more widely distributed and numerically numerous of the groups—the nominate subspecies—is that directly inhabiting areas of reddish sand with scattered wind-contoured red Kalahari sand-dunes, which is distributed from southern Great Namaqualand and the Cape immediately south of the lower Orange R., east to southwestern Botswana and the northern Cape to the general area Kuruman–Olifantshoek–Postmasburg. This group is characterised by a buffish brown cap, dark brown sub-terminal feather crescents fringed greyish buff over the mantle, and light warm buff to the face and unpatterned ventral surfaces. Wings in such birds measure ♂♀ 75–80 mm. Immediately to the north and to the south of the foregoing group, darker birds are present, having the cap about Drab (Ridgway 1912), the dorsum darker with the mantle crescents blacker, and with the light facial and ventral surfaces less warm buff or whiter. In the north of the range in Namibia the wing-length declines (71–75.5), but in the dark birds lying to the south of the buffish ones, the wing-length is only fractionally shorter (73–79 mm) (Table 1).

As the colour and size patterns of variation are not strictly congruent, the differences in wing-length can only be used to a limited degree in arranging the populations into readily recognisable subspecies. In the case of the darker group of populations, this is again seen as an edaphic correlate, such birds occurring in karoo country, sub-desert (Namib edge) and saline pan environments. The disposition of the variation

TABLE 1
The wing- and tail-length (mm) variables (in ♂♀) in populations of the Sociable Weaver
Philetairus socius

Locality	n	Wings			Tails			
		range	\bar{X}	SD	n	range	\bar{X}	SD
<i>Philetairus socius socius</i>								
1. Kochena, NE of Grunau, S Namibia.	19	75-80	77.3	1.39	19	38-45.5	42.1	2.14
2. Perdepan, Gobabis, Namibia.	18	71.5-75.5	73.2	1.23	—	—	—	—
3. Gembok National Park, N Cape.	18	72-78	75.5	1.82	23	39-44	41.2	1.33
<i>Philetairus socius eremnus</i>								
4. Prieska & Carnarvon, Cape.	17	73-79	75.8	1.63	8	40-45	42.2	1.48
5. Hoopstad, O.F.S.	1	77	—	—	—	—	—	—
5. Wolmaransstad, SW Transvaal.	16	72.5-78.5	75.3	1.76	—	—	—	—
6. Damaraland, Namibia.	10	71-75.5	73.7	1.43	10	38.5-44	41.0	1.80
<i>Philetairus socius xericus</i>								
7. Aus & near Bethanie, Namibia.	6	75.5-81	78.5	1.94	6	41.5-44	42.8	0.93
<i>Philetairus socius geminus</i>								
8. Okaukuejo & Leeubron, Etosha Pan, N Namibia.	8	72-75.5	73.7	1.28	8	38.5-42	40.3	1.18

Size-variation in *P. socius* is 2 dimensional and probably temperature dependent, with wing-length as an indicator of overall size shortest in the north of the range (nos. 2, 6 & 8) and largest in the south (nos. 1, 3, 4, 5 & 7). Transition between the extremes in the gradient is in the nature of a relatively narrow step centred from south-central Great Namaqualand, east to southwestern Botswana. In the case of the large-sized southern birds variation is clinal, with size (wing-length) increasing east (nos. 3, 4 & 5) to west (nos. 1 & 7) in association with cooler maritime conditions.

suggests relatively recent sundering and distributional retreat of the populations of darker coloured phenotypes occasional by the (now) more numerous paler and buffier birds, this resulting from an eastward spread of the latter from the basin of the lower Orange.

A re-assessment of the geographical variation in the Sociable Weaver (Fig. 1) based on an examination of over 270 specimens indicates the necessity of recognising 4 subspecies, for one of which a name is introduced. These are arranged hereunder.

Philetairus socius socius (Latham)

Loxia socia Latham, *Index Ornith.*, vol. i, 1790, p. 381: inland of Cape of Good Hope, restricted to Warmbad, southern Great Namaqualand, Namibia, by Macdonald, *Contr. Orn. West. S. Afr.*, 1957, p. 156.

Synonym: *Philetairus lepidus* Smith, Charlesworth's *Mag. Nat. Hist.*, new series, vol. 1, 1837, p. 536: districts round Latakoo = Kuruman, northern Cape.

Pileum Buffy Brown; mantle with feather bases light grey, dark sub-terminal crescents brownish black, fringed greyish buff; rump washed with light brown. Light facial and ventral surfaces Warm Buff. Size large.

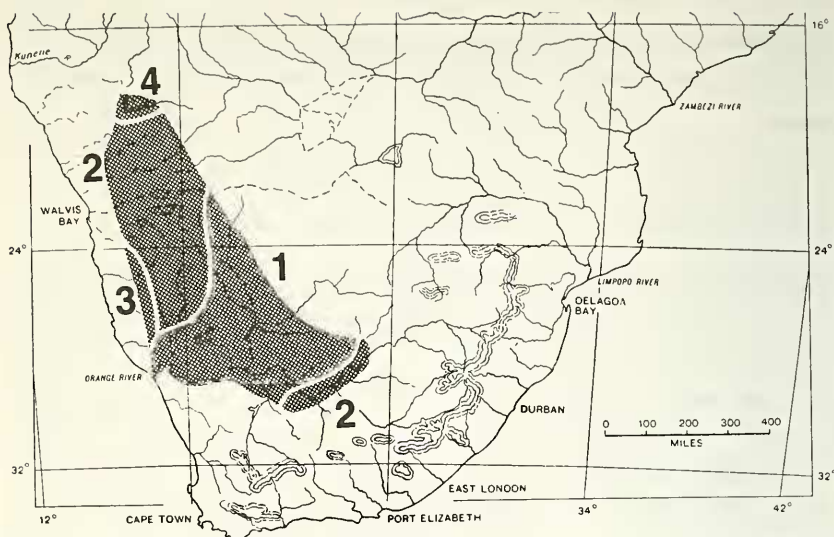


Figure 1. Sketch-map showing the disposition of the races of the Sociable Weaver
Philetairus socius

1. *Philetairus socius socius* (Latham); 2. *Philetairus socius eremnus* Clancey; 3. *Philetairus socius xericus* Clancey; 4. *Philetairus socius geminus* Grote. It will be noted that the range of 2 is split into two sectors and the taxon is as a result polytypic.

Measurements. See Table 1. 207 specimens examined.

Range. Northwestern Cape Province to the south of the Orange R. in Bushmanland, southeast to Kenhardt, southern Great Namaqualand, Namibia, south from about Keetmanshoop to the Orange, and in the east north to about Gobabis (at Perdepan), southwestern and southern Botswana in the Gemsbok National Park, and the northern Cape from the Namibian border to Kuruman—Olifantshoek—Postmasburg. Ecologically associated with reddish sands and areas with red Kalahari sand-dunes. The most numerous subspecies.

Remarks. Smith, in his *Illustrations* (1838), uses the spelling *Philetaerus* for the generic name of the Sociable Weaver, the type of which is Swainson's *Euplectes lepidus*, as proposed in *Lard. Cab. Cyclopaedia*, vol. 2, Menageries, p. 309, this earlier than 1837. Smith's *Philetairus lepidus* as named in Charlesworth's *Mag. Nat. Hist.*, vol. i, 1837, from Kuruman district is, therefore, pre-occupied by Swainson's slightly earlier combination. Moreau (1962) equates Swainson's name with Latham's *Loxia socia* of 1790.

In the event of Swainson's *lepidus* being viewed as a *nomen nudum* and Smith as the specific name's author, the locality Kuruman and diagnostic characters place it as a synonym of nominate *P. socius*.

Philetairus socius eremnus Clancey, *Durban Mus. Novit.*, vol. v, 4, 1957, p. 48: Kransfontein, north of Prieska, northern Cape.

Differs from the nominate race on the basis of a darker cap (about Drab), and less buffish upper-surface, the mantle duller and the sub-terminal dark crescents broader and blacker, the apices somewhat whiter; rump greyer and more squamated, less uniformly buffy. Ventrally, with the chin and throat blacker and the light surfaces rather browner, less buffy. Southern population similar in size, but birds of the northern segment shorter winged.

Measurements. See Table 1. 52 specimens examined.

Range. Karoo country of the middle Orange R. from just north of Prieska in Griqualand West, southwest to Carnarvon, and locally to the northeast in the Vaal R. drainage of the western Orange Free State (Hoopstad) and southwestern Transvaal (at Wolmaransstad, east to Klerksdorp and Potchefstroom). Also Namibia north of the nominate subspecies on the plateau, occurring locally from north of Keetmanshoop to about Otjiwarongo, with the following specimens seen: Neisib, 35 km SW of Helmeringhausen; Mariental; Keres, N of Windhoek; Talana; Otjikango, Otjiwarongo; and Sturmveld and Wilhelmsrute, Gobabis district.

Remarks. *P. s. eremnus* is polytopic, with the nominate form interposed between its 2 population segments. A long series of specimens taken on the property Neisib, to the southwest of Helmeringhausen, and another sample from Kameelboom, to the northeast of Mariental, contain many specimens intermediate between nominate *socius* and *eremnus*, but with the majority referable to the latter.

***Philetairus socius xericus*, subsp. nov.**

Type. ♀, adult. Plateau 38, 20 km E of Aus, western Great Namaqualand, Namibia. 15 October 1970. Collected by P. J. Buys. In the collection of the State Museum, Windhoek, Reg. No. 800.31 and CA 3340.

Similar to *P. s. eremnus*, as defined above, but with the light facial and ventral surfaces pearly vinaceous white rather than pale buff, and with the breast overlaid with drab. Compared with *P. s. geminus* of the Etosha Pan not so sharply marked with black and white over the mantle, the rump darker, and with the light facial and unpatterned ventral surfaces greyish white, washed with drab over the breast and not plain off-white as in *geminus*. Size larger than in *geminus*.

Measurements. See Table 1.

Measurements of the Type. Wing 79.5, culmen from base 17.5, tarsus 20, tail 43 mm.

Material examined. 6 (Plateau 38, 20 km, E of Aus; Vogelstrausskluft, Bethanie district, western Great Namaqualand).

Range. Presently known from near Aus and Bethanie, in western Great Namaqualand, but probably extending north along the escarpment edge inland of the Namib to about the Namib Naukluft Park.

Etymology. *xericus*, from Greek and modern ecology, affecting arid conditions.

Remarks. The whiter facial and ventral surfaces of *P. s. xericus* of the escarpment edge overlooking the Namib associate it with *P. s. geminus* of the arid Etosha Pan region in the north of the species' range. Further sampling of colonies just inland of the Namib to the north of Aus is desirable in order to fix the northern limits of *xericus*.

Philetairus socius geminus Grote, *Journ. f. Ornith.*, vol. lxx, 1922, p. 45: Okaukuejo, Etosha Pan National Park, northern Namibia.

Compared with *P. s. eremnus* differs in ranging a little paler over the pileum; mantle (including scapulars) lighter, the sub-terminal crescents blacker and sharply contrasted against the whitish apical fringes, and rump whiter. Facial and light ventral surfaces much whiter. Wings and tail colder, with the coverts and remiges edged paler. Similar in size to the northern population of *eremnus*. Differs from *P. s. xericus* in having the dorsal crescents deeper black and the mantle feather apices whiter. Facial and light ventral parts still whiter, and lacking the drab overlay to the breast present in *xericus*. Size smaller than in *xericus*.

Measurements. See Table 1. 8 specimens examined.

Range. Confined to the Etosha Pan National Park, northern Namibia, with most of the available records from Okaukuejo and Leeubron.

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Address: Dr P. A. Clancey, Research Associate, Durban Natural History Museum, P.O. Box 4085, Durban 4000, South Africa.

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Amazona auropalliata caribaea: a new subspecies of parrot from the Bay Islands, northern Honduras

by Sebastian Lousada

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In November 1987, S. Lousada, A. Morales and S. Ewing travelled to Honduras to investigate the distribution of Yellow-naped Parrots *Amazona auropalliata*. Our field work revealed 3 distinct forms of the subspecies *A. a. parvipes* inhabiting northern Honduras and the offshore islands. After discussions and correspondence with Burt L. Monroe and Thomas R. Howell, who first described *A. a. parvipes* from the Mosquitia region of eastern Honduras and northeastern Nicaragua, we concluded that there was evidence to describe one of these forms as a new subspecies: